REMARKS

Applicants appreciate the Examiner reopening prosecution in response to the Supplemental Appeal Brief filed January 12, 2006. In response, Applicants respectfully submit that the cited references do not disclose or suggest, at least, deriving a quality of service specification by implication from relations between components, control flows, data flows, and resources. Accordingly, Applicants submit that all pending claims are in condition for allowance. Favorable reconsideration of all pending claims is respectfully requested for at least the reasons discussed hereafter.

Independent Claims 1 and 18 are Patentable

Independent Claims 1 and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the article entitled "Volume II: Technical Concepts of Component-Based Software Engineering, 2nd Edition" by Bachmann et al. (hereinafter "Bachmann") in view of U. S. Patent No. 6,006,264 to Colby *et al.* (hereinafter "Colby"). Independent Claim 1 is directed to a system for component-based processing and recites, in part:

> ...
> a quality of service specification derivation element having for output an application model in combination with a quality of service specification derived by implication from relations between components, control flows, data flows, and resources;
> ...(Emphasis added.)

Independent Claim 18 includes similar recitations. As highlighted above, independent Claim 1 recites a quality of service specification derivation element in which a quality of service specification is derived by ***implication*** from relations between components, control flows, data flows, and resources. This is described, for example, in the Specification at page 14, lines 6 through 15, where the text explains that the quality of service specification may be derived from quality of service requirements that are explicitly attached to the components or flows and/or from quality of service requirements that are ***implicitly*** derived from the relationships within a model comprising the components, control flows, data flows, and resources.

The Office Action cites section 5.2.3 of Bachmann as disclosing the use of specified quality attributes in a component-based software system. (Office Action, page 3). The Office

Action further cites a passage from section 6.1 of Bachmann related to a contractually specified interface specification in which functional properties of a component are specified. (Office Action, page 3). The Office Action acknowledges, however, that "Bachman does not explicitly teach the Qos specification is derived by implication," but alleges that Colby provides the missing teachings. (Office Action, page 4). In particular, the Office Action cites col. 3, lines 45 - 67 of Colby as teaching the derivation of "Qos requirements implicitly from the relationships of the individual components..." (Office Action, page 4).

Applicants respectfully disagree with this interpretation of the teachings of Colby. Column 3, lines 45 - 67 of Colby state:

> Another advantage of the invention is that it performs admission control on a per flow basis, based on the level of local network congestion, the system resources available on the content-aware flow switch, and the resources available on the web servers front-ended by the flow switch. This allows resources to be allocated in accordance with individual flow QoS requirements. (Emphasis added).

Applicants submit that the passage reproduced above teaches that the switching system performs admission control by allocating resources to meet QoS requirements associated with individual flows. Thus, according to Colby, the relationships between flows and system resources are not used to implicitly derive a QoS specification. Rather, system resources are managed to attempt to satisfy previously specified QoS requirements that have been associated with the flows. Colby describes how QoS specifications are derived in column 9. In sharp contrast with the recitations of independent Claims 1 and 18, in which a quality of service specification is derived by ***implication*** from relations between components, control flows, data flows, and resources, Colby teaches defining eight QoS classes and then assigning one of the QoS classes to a flow based on the flow's calculated QoS requirements. (Colby, col. 9, lines 33 - 36). The eight predefined QoS classes are listed in Table 1 in column 9 of Colby.

Thus, Applicants respectfully submit that, even if combined, the teachings of Bachman and Colby do not disclose or suggest, at least a quality of service specification derivation element in which a quality of service specification is derived by ***implication*** from relations between

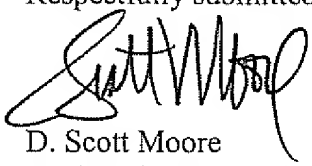
components, control flows, data flows, and resources and a similar recitation in independent Claim 18.

Accordingly, for at least the foregoing reasons, Applicants respectfully submit that independent Claims 1 and 18 are patentable over Bachmann and Colby and that Claims 2 - 17 and 19 - 49 are patentable at least per the patentability of independent Claims 1 and 18.

CONCLUSION

In light of the above amendments and remarks, Applicants respectfully submit that the above-entitled application is now in condition for allowance. Favorable reconsideration of this application, as amended, is respectfully requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (919) 854-1400.

Respectfully submitted,



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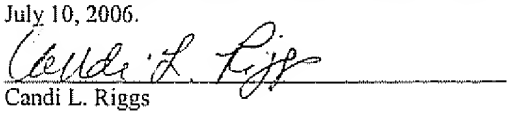

Candi L. Riggs